

A B S T R A C T

Provided is a method of treating or ameliorating certain fibrotic diseases or other indications in an animal, including a human, comprising administering an effective amount of a compound of the formula I:



wherein:

- a. Ar is a five or six membered heteroaryl ring having a first ring nitrogen and optionally second or third ring nitrogens, with the remaining ring atoms being carbon, oxygen, or sulfur, provided the first nitrogen of Ar is a quaternary nitrogen and Ar is not thiazolium, oxazolium or imidazolium;
- b. Y is substituted on the first ring nitrogen, with the proviso that if Ar is pyrazole, indazole, (1,2,3)-triazole, benzotriazole, or (1,2,4)-triazole, the second ring nitrogen is substituted
- c. Y is:
 - 1. a group of the formula $-CH(R^5)-R^6$ [as preferred in one embodiment]
 - (a) wherein R^5 is hydrogen, alkyl-, cycloalkyl-, alkenyl-, alkynyl-, aminoalkyl-, hydroxy[C₁ to C₆]alkyl, dialkylaminoalkyl-, (N-[C₆ or C₁₀]aryl)(N-alkyl)aminoalkyl-, piperidin-1-ylalkyl-, pyrrolidin-1-ylalkyl, azetidinylalkyl, 4-alkylpiperazin-1-ylalkyl, 4-alkylpiperidin-1-ylalkyl, 4-[C₆ or C₁₀]aryl)piperazin-1-ylalkyl, 4-[C₆ or C₁₀]aryl)piperidin-1-ylalkyl, azetidin-1-ylalkyl, morpholin-4-ylalkyl, thiomorpholin-4-ylalkyl, piperazin-1-ylalkyl, piperidin-1-ylalkyl, [C₆ or C₁₀]aryl, or independently the same as R⁶;
 - (b) wherein R⁶ is
 - (1) hydrogen, alkyl (which may be substituted by alkoxy carbonyl)-, alkenyl, alkynyl, cyano-, cyanoalkyl-, or Rs, wherein Rs is a [C₆ or C₁₀]aryl or a heterocycle containing 4-10 ring atoms of which 1-3 are heteroatoms selected from the group consisting of oxygen, nitrogen and sulfur; or
 - (2) a group of the formula $-W-R^7$ [as preferred in one embodiment], wherein R⁷ is alkyl, alkoxy, hydroxy, or Rs [as preferred in one embodiment], wherein W is -C(=O)- or -S(O)₂-;
 - (3) a group of the formula $-W-OR^8$ wherein R⁸ is hydrogen or alkyl,
 - (4) a group of the formula $-CH(OH)Rs$; or
 - (5) a group of the formula $-W-N(R^9)R^{10}$, wherein
 - (a) R⁹ is hydrogen and R¹⁰ is an alkyl or cycloalkyl, optionally substituted; or
 - (b) R⁹ is hydrogen or alkyl and R¹⁰ is Ar^{*}; or
 - (c) R⁹ is hydrogen or alkyl, R¹⁰ is a heterocycle containing 4-10 ring atoms of which 1-3 are heteroatoms are selected from the group consisting of oxygen, nitrogen and sulfur; or
 - (d) R⁹ and R¹⁰ are both alkyl groups; or
 - (e) R⁹ and R¹⁰ together with N form a heterocycle containing 4-10 ring atoms which can incorporate up to one additional

heteroatom selected from the group of N, O or S in the ring,
wherein the heterocycle is optionally substituted; or

(f) R⁹ and R¹⁰ are both hydrogen; or

2. -NH₂, and

- 5 e. X is a pharmaceutically acceptable anion, which may be absent if the compound
provides a neutralizing salt, or
(B) a pharmaceutically acceptable salt of the compound.